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Edited By Dr. U. Rama Rau & U. Krishna Rau, M.B.B.S.

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EDITORIAL

Bloodlessness or Anaemia

BLOODLESSNESS or Anaemia as it is called in medical parlance, is due to either of the two causes—loss of blood or deficient blood production. There are various types of anæmia of which what is known as 'Pernicious anæmia' is the worst, as its very name implies. The symptoms of of anaemia are pallor, debility, digestive disorders and general break-down of the system. The anaemic presents an appearance which may be described without fear of exaggeration, as ghost-like-hideous looking. Dropsy is another grave symptom of the disease. Deficiency of blood in quality and quantity brings on this condition. Blood is no more the thick, purple, healthy blood but thin, water-like, whitish fluid and the body gets swollen with this fluid. Women, especially pregnant women, infants and children are the most susceptible to anaemia. Adult males in the vigour of their manhood and adult females other than pregnant women seldom get this disease, except after a severe attack of infectious diseases such as malaria, influenza etc.

Pregnancy is a stage which calls for the greatest care and attention especially in regard to food. Pernicious anaemia of pregnancy generally results if the food is deficient in minerals and vitamins. The chief minerals which the body needs are Calcium, Iron, Phosphorus and Iodine. If the foods containing these 'leading minerals' are supplied, all other minerals will also be supplied through these sources in their due proportion. Modern Medical Science stresses the need for ante-natal, natal and post-natal care of pregnant women and maternity and Child Welfare Organisations, state-aided or voluntary, have sprung up in all the countries of the world, with a view to make deliveries safe and easy and

thereby reduce the prevailing high maternal and infantile mortality to the lowest possible minimum. In our own country, systematic and organized efforts are still lacking. Whatever might have been the sins of commission and omission on the part of our forefathers in the conduct of maternity and childwelfare work, it must be said to their credit that even in that remote unscientific age, they adopted certain ante-natal, natal and post-natal measures, which are certainly worthy of commendation.

The ante-natal measures were :—

1. The separation of husband and wife and restriction, if not actual prohibition, of sexual intercourse during the period of pregnancy and even lactation.

2. The sending away of pregnant women, especially during the first two or three pregnancies to their parent's house, where they can have greater freedom, less shyness, better care and less work and worry.

3. Feeding only with liquid diets, such as milk, butter-milk etc., and fruits in plenty to tide over 'morning sickness', sweets and other edibles being given only in small quantities occasionally to satisfy their capricious appetite.

4. The performance of certain religious rites and ceremonies attended with feasts and festivities during the first pregnancy so as to keep their minds well-poised and not to be worried over the coming dreaded ordeal of delivery.

5. In short, to keep the pregnant women, well-fed, well-clothed and well-cared-for both physically and mentally.

The following were the natal and post-natal measures :—

1. To isolate the pregnant women and keep aloof all visitors, under the guise of pollution, for a period of ten days and thereby avoid their catching any infectious diseases.

2. To make them fast for the first two days after delivery, the wisdom of which has since been scientifically acknowledged.

3. To use neem leaves and neem oil as disinfectants and antiseptics. The efficacy of neem and its products as disinfectants has now been scientifically demonstrated.

4. To provide them with sufficient lime for intake with pansupari, in order to make good the depletion of calcium from the system.

5 To provide them with plenty of green leafs and vegetables to replenish their lost iron.

6. To insist on breast feeding the child, which is now being fast discarded, aping western method, as a mark of civilisation.

7. To give them plenty of nutritious food and make them do light household work and aid the process of repair and rebuilding of their constitution, thereby averting the danger of anaemia of pregnancy.

The anaemia of infancy and childhood is due mostly to mulnutrition. Lack of vitamins in foods is another contributory factor. Good food means rich blood. 'Deficiency diet' means deficient blood production or bloodlessness or anaemia.

Sugar Becomes Medicine

By

EDWARD PODOLSKY, M.D.,

Brooklyn, New York, U. S. A.

In the old days when man was struggling for reason and searching for the truth the weird and the unusual were the elements most endowed with desirable attributes. In medicine this was even truer than elsewhere. The primitive doctor disdained the everyday for the out-of-the-way in the search for curative agents. Somehow it was his belief that the search for medicines would not be interesting if these medicines were readily available. The medical man of former times saw medicinal virtues in crabshells, snake eyes and tiger's brain, but such common, everyday articles like salt and sugar did not interest him.

It was only within recent times that salt came to the fore as a valuable medicine, and sugar even more so. In the year 1885, Dr Goule, a Swiss surgeon for the first time thought of using a solution of sugar instead of the hithertofore popular solution of salt as a means of replacing lost tissue, water and elements. He had some good reasons for making this substitution. First, sugar has definite nutritive properties; it is stimulating; it does not have a tendency to form blood clots within the veins. From that day on, sugar began to attract the attention of physicians.

In 1905 Drs. Friedrich and Lannander further popularized the use of sugar solutions in medicine, and two years later Dr. Fleig published an essay in which he pointed out the full advantages of using sugar in preference to any other stimulating fluid. Interest in sugar as a medicine now became world wide.

Sugar and Seasickness:—Among the most ancient of all diseases is seasickness, and unfortunately not very much is known about it, even at this time. Many theories have been advanced: many remedies have been tried. When chemical methods of determining the substances found in the blood reached a high stage of development it was found that in seasickness the blood contained a great deal of what doctors call acid bodies, and this gave rise to a state known as acidosis. This finding proved of particular interest to Dr. G. H. Oriel, of the Canadian Pacific Steamships, for to him seasickness was a mighty problem.

For many years it had been known that when increased amount of sugar was given it had a favourable influence on acidosis. For this reason Dr. Oriel determined to try sugar as a remedy in his cases of seasickness, and he had many such during the year. In his first thousand cases of seasickness he gave sugar by mouth without any other medicine. To his surprise and delight he noted that under the sugar treatment there was a distinct improvement in all his patients, the severer the seasickness the more dramatic was the result. The bothersome symptoms, such as headache and vomiting ceased almost at once.

The sugar was absorbed without delay as sugar always is. The acid

bodies in the blood were neutralized. The urge to vomit was controlled and the patient felt in high spirits once more.

Dr. Oriel found that those patients who had plenty of food, particularly when it contained large amounts of sugar were free from dizziness and vomiting spells. When the sugar level in the blood was maintained at its proper height the patient was free from any ill effects. Other medicines which had been used hithertofore proved much less effective than sugar. Sugar took its place as the most reliable medicine in controlling seasickness.

The Vomiting of Pregnancy Yields to Sweets:—There isn't much of a chasm from one type of vomiting to another ; the vomiting of seasickness is somewhat akin to the vomiting of pregnancy. There is an underlying sugar deficiency in each. This was realized by Drs. Underhill, Rand and Ewing as far back as 1910. This interested Dr. Paul Titus in 1925 even more. He made up solutions of sugar in water, sterilized and purified to the highest degree. Dr. Titus, an obstetrician, whose work consists wholly of bringing children into this world, was very much concerned as is every obstetrician, with seeing that the mother went through her period of child-bearing with as much ease as possible. The great bugbear he feared was vomiting, the dread, constant, devitalizing vomiting which affects some women.

Many hundreds of remedies had been tried, but it was sugar which finally proved to be the desired medicine. Dr. Titus had a great many cases in which to see what good sugar would do in controlling the vomiting, 328 of them. In each of these cases he had his ever-ready solution of sugar for injection into the veins as soon as any signs of vomiting became manifested. In all 328 of his cases the administration of sugar abolished the vomiting at once.

The basis of giving sugar in the vomiting of pregnancy was a lack of sugar in the mother's body. This takes place because the growing child in the womb requires great amounts of sugar for its growth and development. This constant drain without subsequent replenishment soon brings on a whole train of unpleasant symptoms, the most serious of which is vomiting. The injection of sugar directly into the blood stream at once restores the sugar level to its proper height and all is well again.

In Germany, Dr. Kausch confirmed the experience of Dr. Titus. He found that sugar was a sovereign remedy not only in the vomiting of pregnancy, but in hysterical vomiting as well. Dr. Hugel found that when the diet was very rich in sugar the tendency to vomit in pregnancy was gone. Sugar as a means of abolishing vomiting when there were too much acid bodies in the blood from then on began to attract attention throughout the world.

Sweetening the Blood in Sleeping Sickness.—Around the year 1927 Dr. Fagley of the Veterans' Bureau in St. Louis had a great many cases of sleeping sickness to take care of. It was the sleeping sickness which followed severe attacks of influenza, and it left in its wake a strange sort of tremor of the arms and legs. Dr. Fagley recalled that during the war sugar injections had been used with good results in cases of influenza, and as sleeping sickness was a sequel of many cases of influenza he thought

that sugar might prove of value as a medicine in some of them. He had some really desperate cases in his wards, and a great many remedies had been tried but without much success.

There is still no medicine which will cure sleeping sickness, but sugar proved to be a remedy which helped to bring the patient out of a great deal of his helplessness. It made life a little more worth while living. In 1927 Dr. Leland B. Alford, a nerve specialist of St. Louis, became interested in the results that Dr. Fagley had obtained with sugar as a medicine in sleeping sickness and decided that it deserved a little more study. He selected forty cases of sleeping sickness at their very height of helplessness and began to inject sugar into their veins.

Twenty-two of his cases in a short time were relieved of all their undesirable symptoms and with only sugar as the medicine. There were eight cases of delerium which nothing would help, and yet sugar relieved five of them completely, and three, most desperate and apparently hopeless, received partial relief. Convulsion was another terrible condition, but this yielded readily to sugar. Headaches and general aches and pains were abolished in almost all of the victims of this disease.

Dr. Alford found that the sooner the sugar was given the better were the results. In the acute cases the benefits obtained were most gratifying. In the older cases, particularly where the tremor of the hands had already set in, the results were not very good. At any rate, Dr. Alford established the fact that sugar when given by vein proved to be a mighty good medicine in that particular form of sleeping sickness which sometimes follows a severe attack of influenza.

Sugar Treatment in Diseases of the Liver.—The first doctor to advocate the use of sugar in diseases of the liver was Dr. A. P. Beddard in 1908. In 1915 Dr. Alford who had always been interested in the medicinal properties of sugar together with Dr. Opie began to study the effects of sugar treatment in the livers of animals damaged by chloroform and phosphorus. They found that when large amounts of sugar had been fed to these animals there was a considerable reduction of the liver damage when the chloroform or phosphorus was given later.

Since then many doctors have become interested in sugar as a medicine in preventing liver damage as well as in treating diseases of that organ. How does sugar prevent liver damage? First, sugar has the property of burning away poisonous substances and in this way converting them into harmless products. Second, it may take these poisonous substances and by uniting them with other substances produce non-poisonous compounds. In this way it prevents the harmful action of the liver substance by such poisons like chloroform and phosphorus.

In 1930 another use for sugar feeding in damaged livers was found by Drs. Ravdin, Riegel and Morrison. In jaundice, in which there is a yellowing of the skin, due to a leakage of bile into the blood, the liver is often diseased. The blood is also in an abnormal condition, particularly as far as its clotting ability is concerned: it fails to clot in the normal time. The giving of sugar to such patients not only has a favourable influence on the disagreeable, itching jaundice but what

is even more important the coagulation time of the blood is brought up to the normal time.

It has been found to be a very good thing to give all patients suffering from liver disease a great amount of sugar. This spares the liver from too much work in producing glycogen or animal sugar, and it gives the liver an opportunity to rest and recover. It also, in this manner, assists the diseased portions of the liver to regenerate themselves. In the milder cases an abundance of sugar in the diet is helpful, but in the severer cases the sugar must also be given by vein. In these times of many remarkable remedies it is sugar which has been found to be the best medicine that science can offer for the treatment of liver diseases and injuries.

Stomach Ulcers and Sugar :—With a wound in the stomach wall the patient doesn't have much of a desire to eat food because of the constant irritation of the ulcer by the rough food particles. And yet the patient must eat to live. This was a problem that particularly concerned Dr. George Recht of the Allgemeine Poliklinik of Vienna. He began to experiment with sugar and found that it was a very desirable food for patients with stomach ulcer because it not only furnished the required energy but also because it did not irritate the stomach wound.

Dr. Recht in the course of his investigation with sugar also found that when the blood was supersaturated with sugar the pain of the stomach ulcer was considerably lessened. This was accomplished by a reduction of the acidity of the stomach secretions and therefore a minimization of the irritative media within the stomach. Another remarkable thing discovered was that sugar was capable of controlling hunger contractions of the stomach as soon as it was given. And as hunger contractions result in a constant changing motion of the stomach with subsequent excruciating pain, the administration of sugar to patient suffering from stomach ulcers is a very desirable thing.

Sugar, of course, does not cure stomach ulcer, but it helps considerably in reducing pain and discomfort. It also aids other medicines in bringing about a cure by putting the stomach at ease and reducing irritation of the ulcerating wound. It is not necessary in such cases to inject the sugar into the blood stream. The drinking of sugar water brings about the desired results.

Sugar injections in Gonorrhoea.—Gonorrhoea is one of the most ancient of diseases. For many years doctors have sought remedies to kill the germ before it has had a chance to do much damage. It was found that the sooner treatment was begun the brighter were the prospects of a cure. In 1923 Drs. Schultz and Richter of Berlin found that when they gave an injection of sugar by vein followed later by the usual treatment of silver salts they were able to shorten the course of the disease considerably. In 1927 Dr. Minder of Leipzig confirmed these results with enthusiasm.

In this country there were also pioneers in the use of sugar as a cure for gonorrhoea. Drs. Redewill, Potter and Garrison were among the first to use the new mercury dye, mercurochrome in the treatment of this disease. They found that when sugar was combined with mercurochrome

the action of the dye was not only further activated but that the tendency to untoward reactions in certain patients was considerably reduced.

The increased amounts of sugar in the blood acted as a buffer against shock which sometimes comes on when a foreign substance is injected into the blood. This was also found to be of value in treating an even more serious venereal, syphilis. Dr. Chenisse of Paris and Dr. Duhot of Brussels found that when sugar was given in conjunction with arsphenamine the sensitive patient did not go into shock, as they sometimes did when no sugar was given.

Shock and sugar.— Shock is one of the greatest accidents that can occur to a human being For years doctors have been seeking means to combat it. In 1917 Drs. Erlanger and Woodyatt produced a state of shock in dogs and ascertained the value of sugar as a means of reducing it. They injected large quantities of sugar into the blood stream and found that the lowered blood pressure promptly rose to its normal level. The tissues hungerily took up the readily-available food, and the pulse became fuller and stronger.

Dr. Matas, whose brilliant surgery of blood vessels won him world known, was particularly concerned with the dangers of shock, and he was among the first to use sugar to combat shock in human beings. The sugar was so quickly absorbed and utilized by the sick human tissues that good results were manifested in a short time.

Severe crises in patients may be brought on by a variety of conditions; after long exposure to cold or privation, extreme fatigue, wasting diseases; exhaustion after child bearing. In such cases an injection of a sugar solution directly into the blood stream is often the means of saving life. Sugar furnishes quick fuel to keep the engines of life going.

Sugar strength in Pneumonia.-- Dr. Lawrence Litchfield in 1916 had a wonderful experience with sugar given by vein in cases of pneumonia at Cam Lee. Pertersburg, Virginia. He had always had faith in sugar as a remedy of value in other conditions, and in 1916 had the opportunity to see what sugar would do for pneumonia patients. He found that when he gave sugar to pneumonia sufferers the body was able to maintain its proper quota of fluids, that devitalizing nausea was abolished and that strength was imparted to the starving body.

It was sugar above everything else which seemed to do the patient most good. Under its benign influence the general appearance of the pneumonia victim began to improve at once. The features lost their pinched look. The patient became bright. The pulse became slower, fuller and stronger; the blood pressure rose. The tongue became moist. The patient began to ask for food and water. The kidneys and bowels became active. If the patient had been restless or delerious, he became quiet and went to sleep.

Since then many other doctors have found that sugar, while it has no direct effect on the diseased lung itself, it is nevertheless of paramount value in furnishing food and water to the dangerously starved body tissues. It gives the patient the necessary strength and assistance in warding off the devitalizing effects of the disease, and

in helping him acquire a new lease on life during his most desperate intervals.

In 1920, Dr. H. H. Koons had charge of five wards of pneumonia and influenza patients. He used sugar injections extensively with the most beneficial results. He found that sugar had a soothing action on the troubled pneumonia victim; it relaxed his tense muscles and gave him strength. Drs. Lynch and Webster in Canada found that sugar was as valuable to pneumonia patients as digitalis was to heart victims, and that on many an occasion it actually proved the means of saving a life.

Sugar in other Conditions:—So valuable did sugar prove as a medicine that doctors began to look about for other conditions in which to try it. Dr. Sansum found that sugar was of value in reducing the terrific eye tension in gluacoma, a most terrible eye disease. Dr. Guthrie found that when sugar was injected into the veins it raised the lowered blood pressure resulting from gangrene of the limbs in certain forms of malaria, with a subsequent improvement in the condition. Drs. Scholtz and Richter found that grape-sugar was particularly valuable in curing acute inflammatory conditions of the skin, drug rashes and a very uncomfortable, blistering condition of the skin known as pemphigus. Drs. Ramenotsky and Kantor found that concentrated solutions of sugar was effective in closing up varicose veins and improving the general circulation of the leg. Dr. Turrettini found that when sugar was injected into the blood stream it had a favourable influence on cases of mercury poisoning.

Sugar is the fuel which fires life's engines. It is the means by which the body is run. If does not require much conversion to reduce it to a form readily available for use by the cells of the body. It is the most quickly utilized of all foods. It is the only food which can be injected directly into the veins without setting up a train of unpleasant reactions. It spares cell destruction in starved conditions. It frees the tissues of undesirable excesses of water and other fluids. It bolsters up bodily energy quickly and without much effort.

Sugar is not only the most valuable of foods for the human body. It is one of the greatest of all medicines. It is not scarce; it is not fearfully complex in its makeup. It is not a poison, and yet for its influence on the body in various diseased conditions there is nothing in the world quite like it.

MAN WITH A HORN

A Bilaspur message says that a man, aged about 25 years, was operated on a horn over his head, which developed at the age of 20 years and was 6 inches high and 3 inches in circumference. Doctors said that it was the only case they had ever seen.—THE RADIO TALKIE & ELECTRIC NEWS.

Some Practical Hints for doing Physical Exercises

By

R. RAJAGOPALAN, B.A.,

Ootacamund.

IN my previous article, I defined physical culture and urged its necessity for the physical well-being of every man.

Having selected a course it is good to be regular and not to vary the time of the performance of exercises. If a person finds it convenient to do his exercises in the morning it is well and good. If his vocation is such that he could not spare twenty minutes of his morning time, it does not matter that he does it in the evenings, but the rule is never to change the time every day. A certain portion of a day must be allotted for physical exercises. As it is essential that the stomach should not be heavy when doing exercises, two hours before or after any meal is the proper time.

For a beginner certain difficulties may arise but the aspirant to physical culture should not be discouraged by them. For instance, at the beginning he might not be able to do an exercise a number of times and certainly it might prove beyond his capacity. For one or two days, there may be pain in the muscles. The latter will vanish in due course and when the muscles get hardened he will be able to do the exercises any number of times. As a precaution, when pain commences, it is better to stop the exercises for a day or two till the pain disappears and then to begin them once again.

There is nothing to be alarmed at when one feels indisposed to perform his exercises any day. Even veteran physical culturists feel disinclined to exercises on certain days. It should not be considered as physical inability to do them. It is due to sluggishness. My experience is that when once you overcome that feeling and fall to exercises you find yourself as fit as ever.

R. Rajagopalan, B.A.

All physical culturists insist upon fresh air. Open air is the best, but if privacy is desired a room with all the windows open should be preferred. It is true that a good supply of air is necessary but draughts are unhealthy. Such precautions as breathing through the nose and nose only

must not be forgotton. A cold bath after vigorous exercises besides removing the waste matter thrown out through the pores of the skin will give a fresh feeling. A certain amount of time should elapse after the exercises before taking a bath.

Persons who undergo a system of exercises must supply their body with nutritious food. A nutritious meal does not mean heavy meals with a number of side dishes. The food that you eat must be rich in body-building materials but must not encourage gluttony. Assimilation is the chief factor. Any food taken in if well assimilated will provide the needs of the body. For my part—leave alone the caste regulations—I would favour vegetarian food. Eating flesh to put on flesh is against human nature. There are as much of body-building ingredients in vegetables as there are in mutton, beef, fish and other animal foods.

Most of the physical culturists abhor coffee, tea and cocoa and cups " that cheer" and cups that "inebriate". If one cannot completely discard them he should atleast keep himself within reasonable limits. The action of stimulants on the system is that they let loose the reserve energy and ultimately leave the body broken down.

Concentration is the most important point while doing exercises. It is the thing which develops the physique. Had it not been so, a daily labourer will have the splendid physique of an Achilles or a Hercules.

Now for a course of exercises without appliances for the uniform development of the body.

Let us start with the most popular of Indian exercises, *Dhandals*. It is a system by itself as it gives proper strain for all the muscles of the body. Fig. 1, below depicts the characteristic pose of the exercise.

Fig 1

Kneel down on the floor and measure out a distance of one cubit and four fingers from the knees. Place the hands at that point, hands separated by a little more than the breadth of the chest. Straightening the hands lift the body and hold it over the toes and hands. Bring down the buttocks to the heels, without the knees touching the floor. Slowly make a forward movement and touch the floor with the nose and then lift the trunk alone keeping the parts beyond the hip stiff and straight. Then assume the original position.

This exercise gives strain to the muscles of the shoulder, chest, hip and thigh and no wonder it is a course by itself !

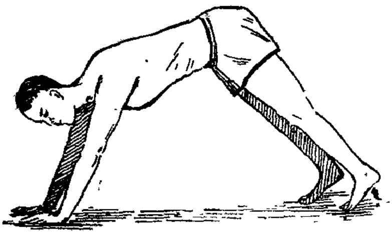

Fig 2

Fig. 2 depicts a slight modification of the above exercise in that it gives strain to the parts above the hip only.

Assume the posture as in the figure

keeping the hands and legs straight. Try to look at the abdomen by bending the head towards the legs. Slowly bring the trunk forward and touch the ground with the nose. Go back to the first pose. Great strain will be felt at the back and this is a good exercise for developing the back muscles.

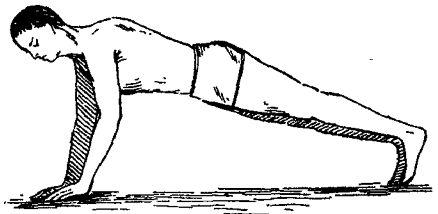

Fig 3

The third figure concentrates upon the muscles of the shoulder, hands and chest. Pose as in the figure. Keeping the body stiff, bring the body to the ground by bending the hands only and then rise up. Repeated movements give strain to the hands.

soon as you finish this exercise a little rolling of the neck does good to the cervical glands and muscles besides removing the slight pain felt after this bending exercise.

Next exercise to be done is the ordinary *Bhasky*. Repeated standing and sitting constitutes this famous exercise. Wrestlers of India perform this particular exercise hundreds of times. It has no parallel for developing the thighs. But runners should refrain from doing this much as experience shows that it makes the legs heavy and takes away the nimbleness, the essential for fast running.

Indians in general take little care of the abdomen. Wrestlers, most of them, have an unsightly belly whereas boxers of the West devote much attention to the abdomen. Muscles of the abdomen get good exercise by the following :—

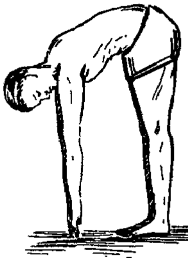

Fig 4

Fourth is an exercise for the hip. Waist muscles should have proper movements especially for young men as it increases vitality. This is nothing but bending the trunk from the attention position. When the hands touch the ground the legs must be stiff. Similarly try to bend as far backward as possible. Ten times forward and ten times backward keep the waist in form. As

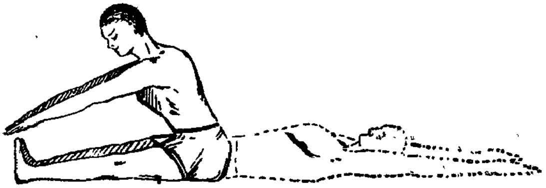

Fig 5

Lie flat on the floor stretching the hands beyond the head. Slowly get up and try to touch the feet by the hands as in fig. 6.

A little more strain can be given to the abdominal muscles by altering the exercise a little.

Fold your hands against the chest and lie down on your back. Slowly without raising the legs from the ground, get up.

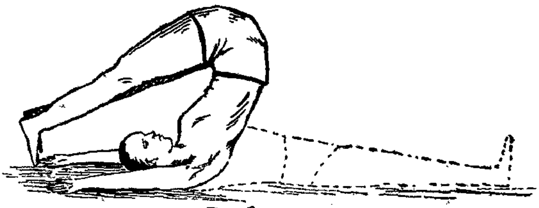

Fig 6

Another exercise, a little hard for beginners, is the assuming of the yoga pose called "*Hala Asan*". This consists in lying flat on the ground and then bringing the legs to touch the hands which are stretched above the head as in figure. This has a curative value for seminal weaknesses and is certainly a preventive for big paunches.

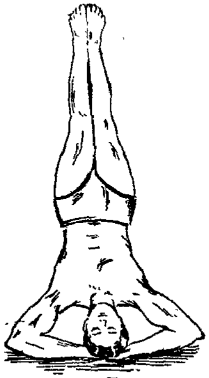

Fig 7

Last but not least is the other yoga pose called "*Siras Asan*". This should be tried beside a wall in the case of beginners. In short, this may be called standing on the head with hands locked behind to protect from falling backwards. This is credited with the power of stimulating the brain by drawing down to the head the seminal fluid through the spine. Blood rushes to the face and consequently gives a freshness to the face. Sleeky cheeks can be avoided.

A lay-man who is a novice to physical exercises may not be able to do the above all at once. Slowly and steadily he should learn them. Half an hour a day with these exercises ought to bring about a good development.

Sincerity and concentration are the two essentials for the performance of physical exercises. A developed physique besides giving pleasure and pride to the possessor is a sight to the onlookers. Instead of being a mere coat hanger, he will look like a Grecian statue even in rags. What it is to have a good physique is beyond expression. It can only be felt.

Influence of Diet on Health

By

DR. L. A. RAMASWAMI IYER,

Medical Officer, Badagara.

OF the three important necessaries of all living organisms in the world *viz.*, air, water and food, it is food that man with all his intellect changes in a variety of ways from its natural existence. And in his anxiety to prepare his food to satisfy his palate in several ways the natural ingredients and principles are destroyed to the detriment of his health. If only we study from the book of Nature and copy our habits from the lower animals much of our sufferings from diseases would be unknown to us. The food for lower animals and man provided by Nature is the same—*seeds, fruits, leaves, flesh, fish* etc. Our domestic

animals and wild beasts in the jungle eat them raw and drink only the natural water and yet see how stronger they are and free from many diseases which haunts us practically every day. When we trace back our history to the days of our forefathers, we are no doubt surprised to know that they were much longer lived, more free from diseases, had better physique and lived happier lives. The regularity, moderation and the natural state of their food were indeed responsible for these. That the health of our countrymen is gradually deteriorating is amply evidenced by the fact that the number of Hospitals and inmates therein are increasing year by year by leaps and bounds, new diseases are springing up and doctors of all descriptions are multiplying like bacteria. No doubt the numerical strength of the people is increasing due perhaps to the marital relations in and out of season. But, the children are in most cases weak, unhealthy and deformed rendering themselves easily susceptible to diseases. This deplorable fact is due mostly to errors in diet of the parents and consequent devitalisation. The indulgence in animal diet, alcohol and other stimulants for increased virility and unnecessary lust takes away the vitality and causes premature senility and death. Most of our people in their social relations with the westerners indulge in *animal diet*, alcohol and tobacco which contrary to the natural conditions of Tropical regions act detrimentally on their health and end in untold sufferings. People take a wild fancy to tinned and bottled milk and food from foreign countries which are not only devoid of any food value, but act injuriously on the health. The richness of our country in vitaminous fruits, seeds, vegetables and milk is not taken full advantage of, but the latter are exported in large quantities in the raw state and the valueless and rotten stuff out of them is imported at four to six times the value of the original products, and consumed for the sake of luxury in the name of civilisation and utter ruin to the individual's health. Excessive indulgence in Tea, Coffee, Cocoa etc., blunts the delicacy of the mucus membrane of the alimentary tract, diminishes the proper secretions of the digestive juices causing loss of appetite, indigestion and improper excretion thus rendering the individual fall a prey to a host of diseases. It is now established that a proper diet to maintain good health must contain what are known as vitamins besides proteins, carbohydrates, fats, salts and water. These vitamins are generally to be had only in small quantities, but a diet that does not contain these valuable factors though in small quantities gives rise to deficiency diseases such as scurvy, beri beri, rickets, osteo-malacia, bad teeth and certain eye diseases. Domestic animals such as goats, cattle, birds etc., and people having a lacto-vegetarian diet have plenty of vitamins in their daily diet and they are as a rule free from constipation and auto-intoxication of the bowels which cause several ailments. Nearly seventy five per cent of the present day mankind have constipation, dental caries, deficient growth and defective vision to which almost all the chronic diseases could be ascribed. These vitamins are generally present in the vegetable kingdom and are conveyed to man either directly

as such or indirectly in the form of milk and *meat*. Mothers' milk which has a high percentage of vitamins derived from greens and fruits is an essential diet for infants and young animals. The chemical composition of vitamins has not been definitely found out but they are readily destroyed by heat, drying, tinning and oxidation. How these vitamins act in the system is also obscure but that they are metabolic stimulants rendering easy assimilation of certain articles of food has been definitely found out. It is very essential that the products of digestion of every cell is excreted regularly and properly for the up-keep of its healthy condition and for this a diet rich in vitamins is essential. That constipation is a potent cause of all the civilisation diseases, arising out of dietetic errors is proved by the following words of Col. MacCarrison, the diet specialist. "For some nine years of my professional life my duties lay in a remote part of the Himalayas, amongst isolated races far removed from the refinements of civilisation. Certain of these races are of magnificient physique, preserving until late in life the characters of youth—they are unusually fertile and long lived and endowed with nervous systems of notable stability. I never saw a case of asthenic dyspepsia, of gastric or duodenal ulcer, of appendicitis, of mucous colitis or of cancer. Amongst these people, the abdomen oversensitive to nerve impressions, to fatigue, and anxiety, a cold was unknown. I begin to think faulty nutrition is the bed rock cause of the vast majority of tissue ailments. It is a definite fact that the physique of people living in remote country parts is much better than that of the communities living in a state of civilisation." Col. Dhera says "All over the world the influence of the diets and habits of the white men is causing the deterioration of these robust races whenever contact is effected between them, and the process of degeneration goes on till finally the physique of the native and his liability to diseases becomes identical with that of the people amongst whom his lot is cast." The above named candid opinions of two of the eminent European doctors with Indian experience will speak for themselves to the benefit of our countrymen.

THE SUN AS COOK

Dr. Charles Abbot at the Mount Wilson Observatory in California has succeeded in using the heat from the sun to bake bread in an oven. The apparatus he uses consists of a number of small mirrors so mounted on a frame with turning axle as always to face the sun. These gather the heat and transmit it through a number of tubes filled with oil and protected by vacuum jackets. When heated by the focussed rays of the sun the oil rises and circulates around three sides of an oven. Thus no fuel is consumed, for the same oil can be used indefinitely.

Dr. Abbot has also raised enough power with this tubular boiler to work a small engine. A leading physicist has said that the amount of energy reaching the earth every minute would run all the machinery in the world for three years if it could be utilized.—THE TREASURE CHEST.

Some Common Dental Superstitions

By

DR. S. K. GUPTA,

Surgeon Dentist, Ambala Cant.

UNFORTUNATELY the public in general is encouraged by some section of the medical profession about the following superstitious beliefs. The reason, why the public and even medical men have come to believe in these superstitions, is the excessive frequency of dental and mouth diseases among the civilised people. Dental troubles among these people are so common that they are now believed to be natural, and not pathological, due to neglect, that they indeed are. So, the medical practitioners are advised to strongly urge the care of the teeth and the mouth at all times, and also unhesitatingly recommend whatsoever dental treatment that may be needed.

1. Dental treatment during the period of pregnancy, disfigures the child by birthmarks and weakens it.

2. During pregnancy any dental treatment done will give a shock to the patient, and so cause miscarriage or abortion.

3. It is but natural for a woman to suffer from any kind of dental trouble during gestation.

4. Diet during pregnancy has little effect on the teeth of the child, because the teeth of the child erupt when he or she is at least six months old.

5. A mother must expect to lose at least one tooth for every child she brings out in this world.

6. Every tooth of the baby has very short roots.

7. Thumb-sucking habit of the baby will correct itself as the child grows older.

8. Mouth-breathing and thumb-sucking do not effect or favour the projecting forwards of the upper jaw of the baby.

9. A bad set of milk-teeth does not affect the permanent teeth in any way.

10. If the gum-boil disappears itself, the tooth that caused it is well again.

11. Smoking relieves the tooth-ache.

12. By dropping kerosine oil, the pain of a carious tooth is relieved instantaneously.

13. Caries (gradual destruction of the teeth) is caused by some kinds of worms or germs which spoil the teeth.

14. The removal of infected teeth from the mouth will cure all the diseases to which human flesh is heir.

15. *After the extraction of a tooth* for symmetric reasons, the trouble will clear up immediately.

16. After extraction of a tooth, there should be no bleeding at all from the tooth cavity.

17. After an extraction the wound will heal better if the mouth is frequently rinsed with mouth-washes.

18. When the nerve of any tooth is taken out, all trouble with that nerve is over.

19. One's death is near, if any permanent tooth instantaneously drops

itself out without meeting any accident.

20. All gold crowns are a menace to health.

21. It is necessary not to tell a lie after having any tooth crowned with gold.

22. It is dangerous to the eyes to get any tooth extracted from the upper jaw.

23. Chewing of hard things weakens the teeth.

24. The teeth become weak after being scraped or cleaned by a dentist.

35. Pyorrhoea Alveoloris is never cured.

26. A dental Surgeon should be consulted only when there is great need for an extraction or for filling when the tooth is badly affected with caries.

Notes on Health and Beauty

You Can be Beautiful

We are frequently impressed with the beauty of some acquaintance, but most of us drop the matter there. We do not go further and analyse just why we think Mrs. So-and-So is beautiful. Perhaps if we did, we would gain many points which could be used to our own advantage.

Some women achieve the effect of beauty by perfect gowning, others, by exquisite grooming, absolute daintiness, still others by their splendid physical development, and not a few, by their charming manners or vivacious wit.

So, we see that beauty is not a simple affair. It is a composite of many qualities, which can be reduced to three distinct elements–the physical, the mental, and the psychic, or soul beauty. Perfect beauty, which is the ideal we are all striving for, is the harmonious development of all the three of these factors.

We all know women who are physically very beautiful, and yet who fail to appeal to us because they are dull, un-interesting, often cold. We also know women, whom nature seems to have cheated of every outward attribute of good looks, who nevertheless have such brilliant minds that we are drawn to them. But there is no reason why one should be contented with a lop-sided development. The woman whose physique is faultless would be far more attractive if she were also mentally brilliant and radiated a warmth of emotion. The woman whose life has been devoted to the sharpening of her intellect, would gain by making her body a beautiful temple for her mind. True beauty is the expression or out-pouring of all our qualities physical, mental and psychical. To achieve this ideal, we must first of all understand ourselves. *You*, as you are to-day, are the outcome of your thoughts, emotions and desires. " But ", you answer, " how can that be true, because I am plain, and I am sure that *I want* to be beautiful ". No doubt you do, but instead of using your thinking-box directly to build that desired beauty, you persist in thinking of yourself as " hopelessly plain ".

I would now like to take up every phase of beauty culture, external, internal, psychological, and physical, for they are interdependent, and no permanently beneficial results can be obtained by any system which disregards either.

You could apply all the wrinkle creams on the market, but if you persisted in worrying, wrinkles would still appear. On the other hand, you could use suggestion daily, by repeating. "I am healthy, strong and happy", and if at the same time, you disregarded the common-sense practices of hygienic living, you would soon be a subject for the doctor's attention.

Know Thyself

In order to make any headway towards realising our ideal of health and beauty, we first of all have to understand ourselves. The science which deals with this system of study, is psychology. *Psyche* of course, means soul, and *logus*, means record or wisdom. Psychology, therefore, means the study of the soul. As we are each of us individual souls, the study of psychology is self-study. No study is beneficial which does not eventuate in applications. Psychology has to be continuously applied to obtain results.

No line of distinction need to be drawn between mind and soul. Splitting hairs only sidetracts us from the desired end, namely, a sufficient understanding of applied psychology to enable us to be healthier and more perfect human beings.

The body is the outward expression of the mind. And an impaired body is the result of an impaired mind. You may not like to admit this. But it is true. Try to prove its validity. You can test the assertion by using the two great tools of psychology, analysis, and suggestion. Analysis, uncovers the roots of the trouble, suggestion, overcomes it. In this connection remember, that a healthy mind or soul, cannot bear an impaired body. It will automatically, and in the long run, build a suitable medium for expression.

The Real You

If you were to take an electric light bulb and cover it with a shade made of innumerable layers of material, the light thrown by it would be greatly dimmed. Human beings for the most part, greatly resemble such a light. Each individual soul is of itself all-powerful, perfect, beautiful. But it is wrapt in sheaths of prejudice, wrong-thinking and destructive emotionalism. Its perfection is dimmed by these sheaths, the light it radiates, puny in comparison with its unlimited ability. Our object therefore, is to get at the back of these imperfections, to the real, the divine image. In the depths of the sub-conscious, lurks the image of the perfect woman *you* ought to be, that you *can* be. The worm never dreams that it will one day be transformed into a beautiful butterfly. Woman has just as little idea of what it is possible for her to become, or achieve. She is slumbering in a cocoon of ignorance. But it is possible for her to break through this cocoon into the sunlight of health, love, service and success.

The first step is realisation. Know that within you is slumbering a perfect being, beautiful, healthy, and magnificiently powerful. Get a clear, vivid picture of the you, you long to

be. Burn this picture into your mind. Keep it before you constantly, this ideal of yourself. And, like the story of the boy who kept gazing at the stone image until he grew to resemble it, *you*, too, will soon leave the surface *you*, behind, and begin to cast the sheaths that are fettering your ideal self.

A Few Beauty Don'ts

Don't forget, when drying the face after washing, to rub upwards towards the nose. This will prevent wrinkles and help smooth out to a great extent, the crease alongside of the nose.

Don't use either hot or cold water for bathing exclusively. A good rule to follow, is a hot bath at night, and a cold one in the morning.

Don't wear tight shoes if you desire a graceful carriage, no woman can walk comfortably or well in a shoe that is too small. Besides, a small shoe distorts the foot in an unnatural manner.

Don't attribute the desire to preserve one's physical charms to vanity. The first element of beauty is health, and she who would be beautiful, must have pure blood, and be sound of mind, and healthy of body.

Don't eat too many sweets.

Don't forget to drink several glasses of water daily.

Don't forget to go without meat at least two days each week, while an occasional lunch made up entirely of fruit is also good.

Don't forget to look ahead at least ten years in the care of your health and figure, instead of waiting until the damage is done, and then trying frantically to correct it.

Health Tit-Bits

When Doctors Disagree—

" Eat what you like,"
Said Doctor A.
" Enjoy yourself,
Live for to-day.'

" You must not mix,"
Said Doctor B,
"Fresh fruit and starch.
They disagree."

" Go on a fast,"
Said Doctor L;
" Eat not at all,
And you'll be well."

"You've got to stuff,"
Said Doctor R,
" Or you'll become
Quite angular."

" Eat only prunes,"
Said Doctor O;
" On food intake
You must go slow."

" Eschew all meat,"
Said Doctor K,
" And live the bi-
Ologic way."

" Ignore pet fads,"
Said Doctor M,
" Or you will wear
A diadem."

Thus doctors all
Quite disagree,
While men die of
Perplexity;

GRENVILLE KLEISER.

—*Health for All.*

Nine New Kinds of Water.—Chemists of recent years have discovered that water is by no means the simple compound that it is supposed to be. Instead of being one water, it is now known that there are at least nine, and perhaps more, different kinds of water. Absolutely pure water has never been known until the last few months, for the very purest water heretofore obtained has been found to contain at least twelve parts per million of another kind of water about one-ninth heavier than ordinary water. And it has also been discovered that there is another variety of water heavier still, but it is present in such small quantities that it will probably never be obtained in a pure state.—*Good Health (U.S.A.)*

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Abraham Lincoln's Code of Health.—Do not worry, eat three meals a day, say your prayers; be courteous to your creditors, keep your digestion good, steer clear of biliousness, exercise, go slow and easy. May be there are other things that your special case requires to make you happy, but, my friends, these I reckon will give you a good lift.—*Good Health (London)*

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Milk for School-children.—By supplying milk to school-children at a half-penny for a third of a pint, England has diminished to a marked extent many of the consequences of under-feeding among them, such as anæmia, tuberculosis and rickets. Twenty years ago, it was found that one child in 8 was underfed, now only one child in 20 is underfed. This is a gain, the value of which cannot be overestimated. Cannot something be done to supply milk to school-children in India free or at a very low price?—*The Treasure Chest.*

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Cause of Baker's Eczema.—*Zitzke, E., Jour. of Ind. Hyg., July, 1934, XVI, 4, 218.* Eczema among bakers is an increasingly important problem in Europe. In the Skin Clinic, University of Cologne, 149 bakers so suffering were investigated. The investigation attempted to determine by subcutaneous and patch tests, first, whether the eczema were an allergic disease arising from sensitization through the occupation; second, whether it is caused by the albumens in the flour; and third whether the injurious substance is to be found in the chemicals used to improve the flour.

Examinations showed that 41.8 per cent eczematous patients reacted to flour not treated with chemicals, while 67.2 per cent reacted to chemically treated flour. Investigation of the chemicals used in the treatment of flours indicated that ammonium persulfate was the injurious substance. Evidence is submitted showing that the manufacture of persulfates has similar effects. Two bakers exhibited a hypersensitivity to pure flour. The sensitivity to persulfate is lost when the bakers discontinue their trade. These results have been used in examining candidates for apprenticeship to this trade. Nearly 6 per cent of 450 pupils so examined were warned not to enter the baking trade, and of these, several who did enter it have develoed eczema.—*(C.P.B.) National Health Review.*

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Man may Live Up to 200 Years.-Dr. E. H. Baker an American and a

former research worker of the University of Chicago, who is at the moment in Ceylon claims to have discovered a method by which man may live up to 200 years.

He recommends the eating of certain edible seaweeds which he says, has always played a part in the diet of primitive man and savages living near the sea. It was largely responsible, modern science believes, for their freedom from disease.

For the last fifteen years, he continued, he had been experimenting this subject as he did not like the idea of dying when he could reasonably live if he followed Nature's methods. He had discovered a method, he said, whereby he was able to put in fat where it was wasted.

Dr. Baker, who is now 70 will shortly be coming to India to make personal investigations into the secret of Yogi life.—*Practical Medicine.*

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Liability for Obnoxious Odors.—*Parker, L. T.; Municipal Sanitation, 1934, May, p. 166.*—The Courts have consistently held that a municipality may be liable in damages for an injury, discomfort or inconvenience resulting to property owners and caused by operation of a sewerage system. This rule of the law is especially applicable with respect to offensive odors.

In fact, many higher Courts have held that the owner of the land has a right that the air which comes upon his premises shall come in its natural purity, free from artificial impurities such as originate from a sewage disposal plant.

In other words, a city must not use its own premises in such a manner as to discharge into the atmosphere noxious gases and odors which substantially affect its wholesomeness to the damage, inconvenience, discomfort and injury of the owners of adjoining property. This right of the air in its natural condition is one of the rights that attach to private property, and if it is denied the owner by being substantially invaded by a city's discharging noxious odors the city may be liable.—(G. H. F.) — *National Health Review.*

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Maternal and Infant Hygiene.—*Excerpts from article in Hygeia on "Bearing Better Babies," by Dr. Richard A. Bolt.*—Dr. Bolt stresses the following measures for promoting the welfare of the young mother and her child:

1. The selection, early in pregnancy, of a capable physician who has good judgment and obstetric skill.
2. The co-operation of both parents with the physician in every step of the process.
3. Early, systematic, prenatal care continued throughout the entire expectant period, in which a well trained public health nurse can play a large part.
4. Careful hygiene of pregnancy under the direction of a physician and a nurse.
5. Dispelling the notion that every labour should be hastened and that the obstetrician should resort to artificial or instrumental delivery.
6. Especial attention to the nutritional aspects of pregnancy.
7. The best possible care for the new-born baby and periodic attention throughout infancy by a capable physician experienced in pediatrics.
8. Prevention of the acute communicable diseases through immunization when possible.—(*G. H. F.*) *National Health Review.*